OIPE IAP70
APR 11 2008
PATENT & TRADEMARK OFFICE

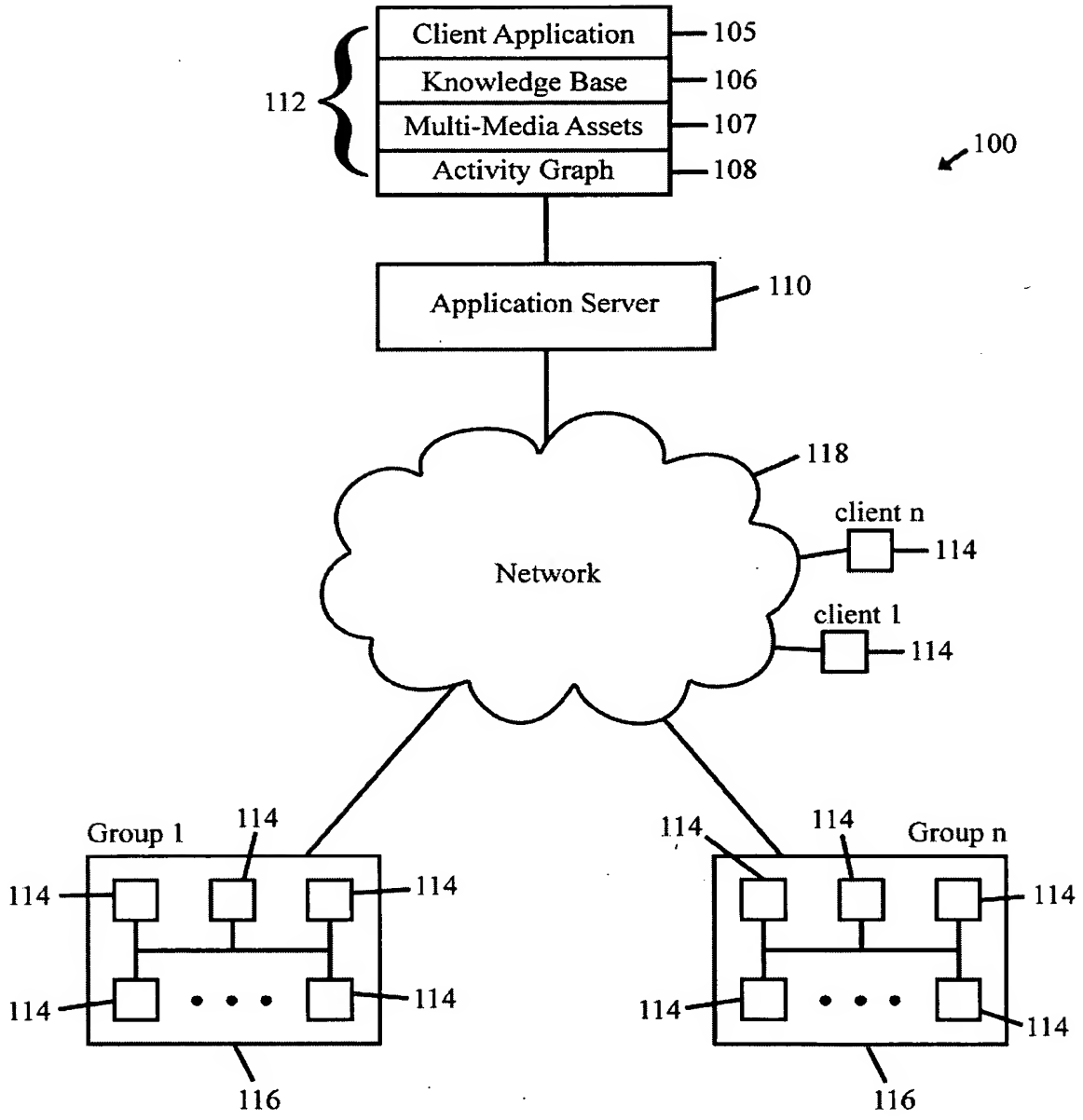


FIG. 1

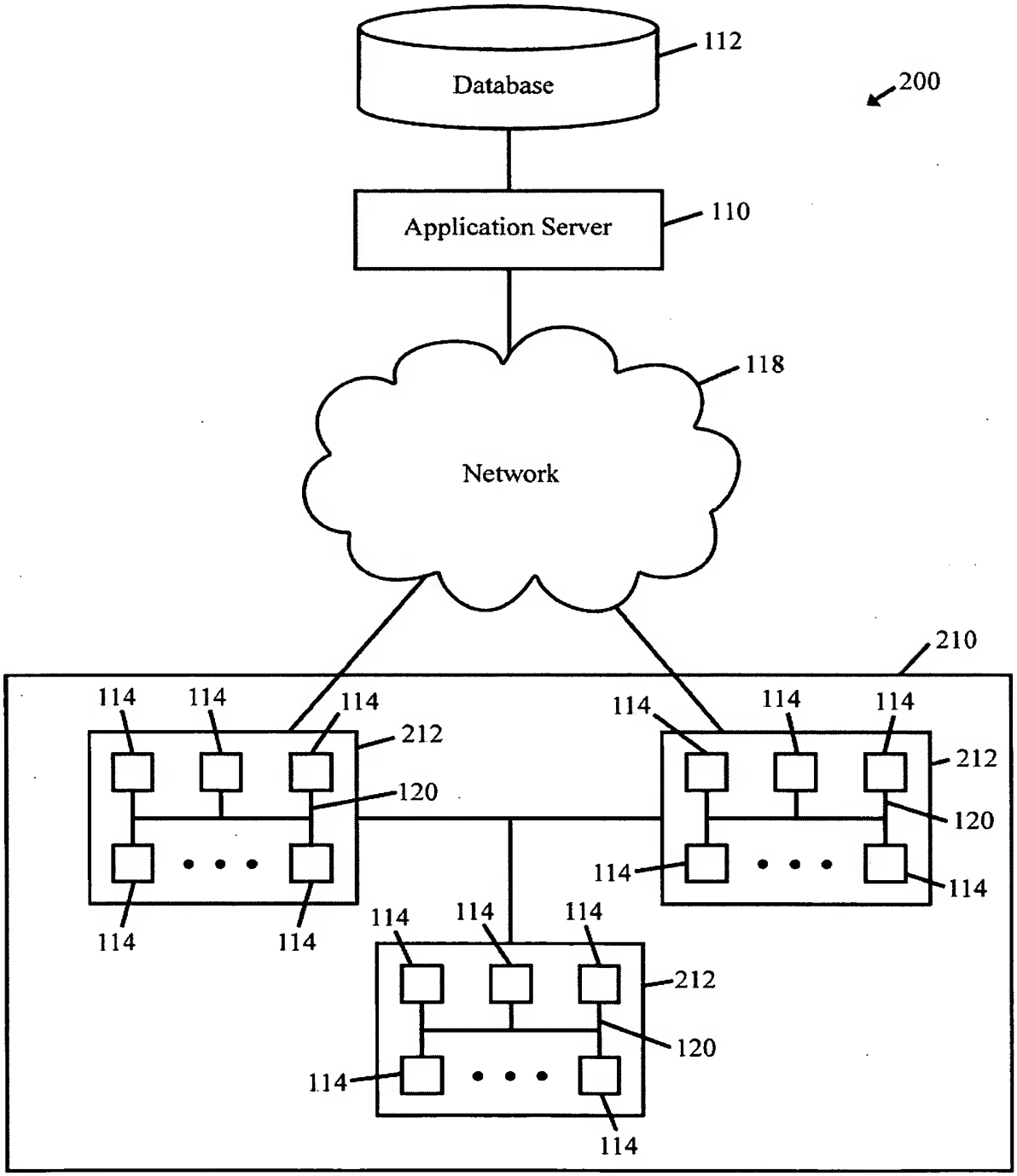

Database
112
200
Application Server
110
118
Network
210
114
212
120

FIG. 2

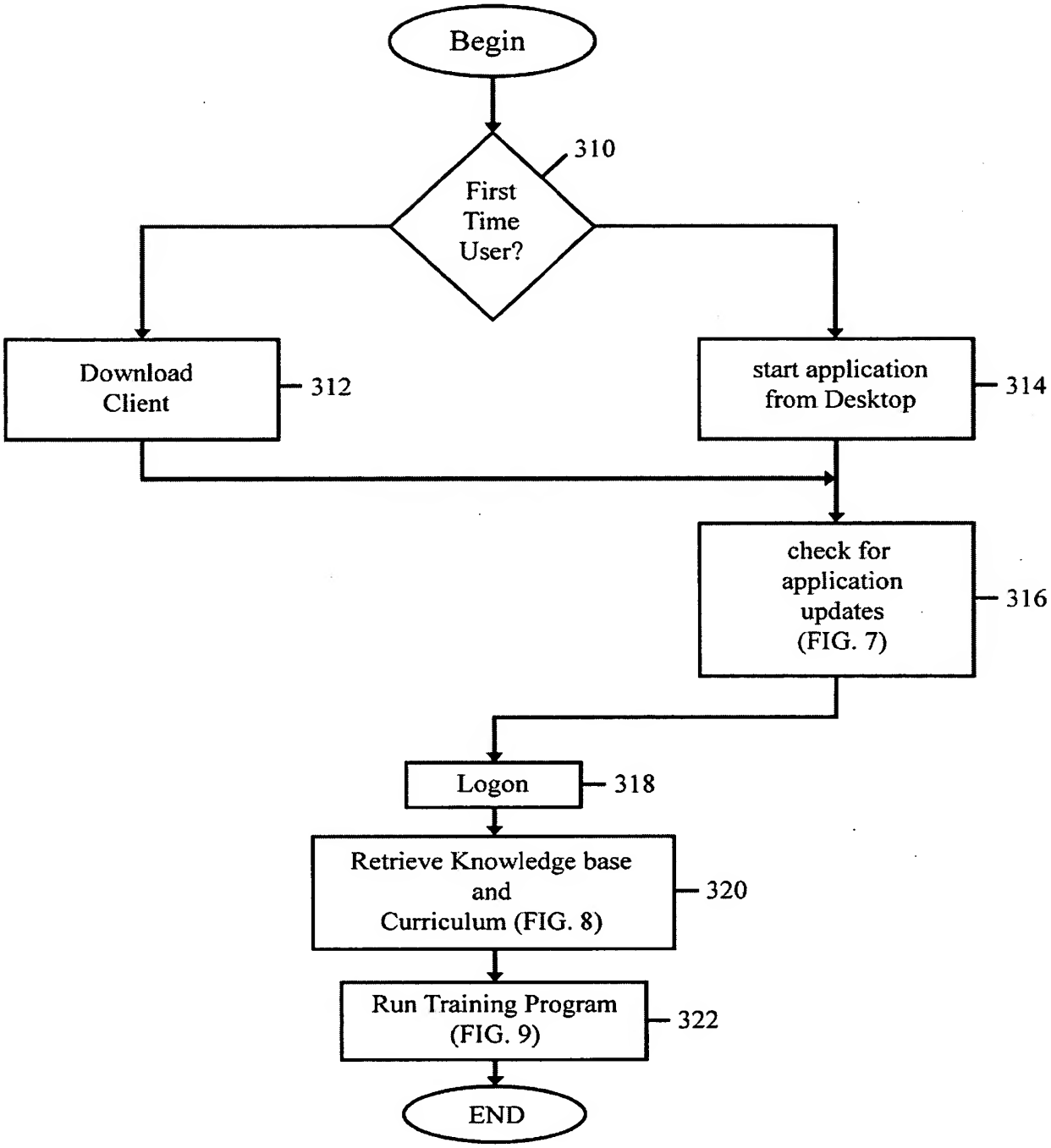

Begin
310
First Time User?
Download Client
312
start application from Desktop
314
check for application updates (FIG. 7)
316
Logon
318
Retrieve Knowledge base and Curriculum (FIG. 8)
320
Run Training Program (FIG. 9)
322
END

FIG. 3

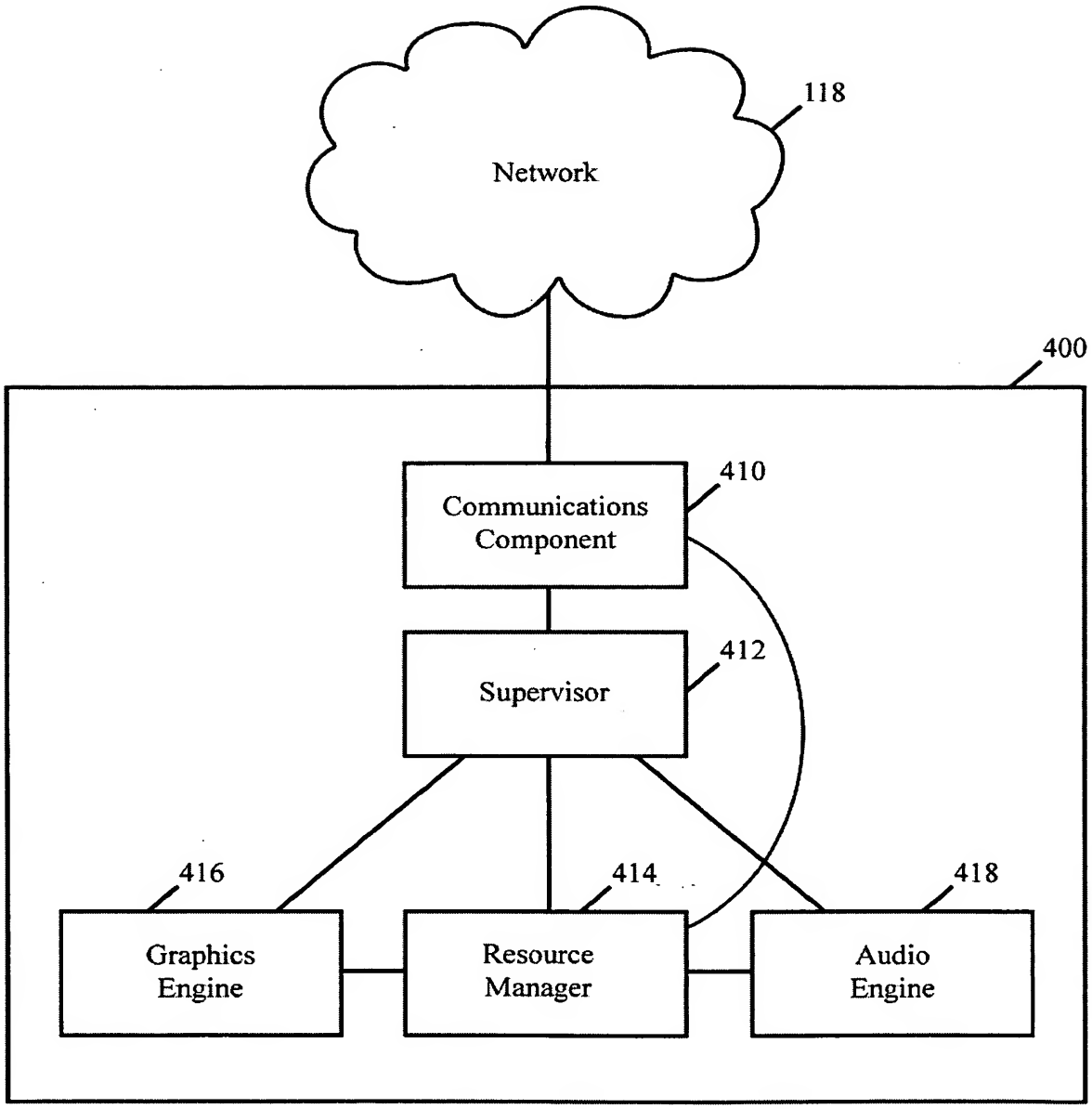

Network
118
400
Communications Component
410
Supervisor
412
Graphics Engine
416
Resource Manager
414
Audio Engine
418

Fig. 4

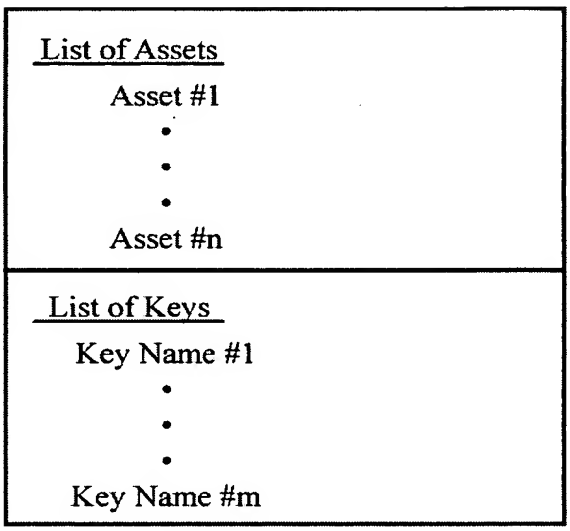

List of Assets
Asset #1
Asset #n
List of Keys
Key Name #1
Key Name #m

FIG. 5a

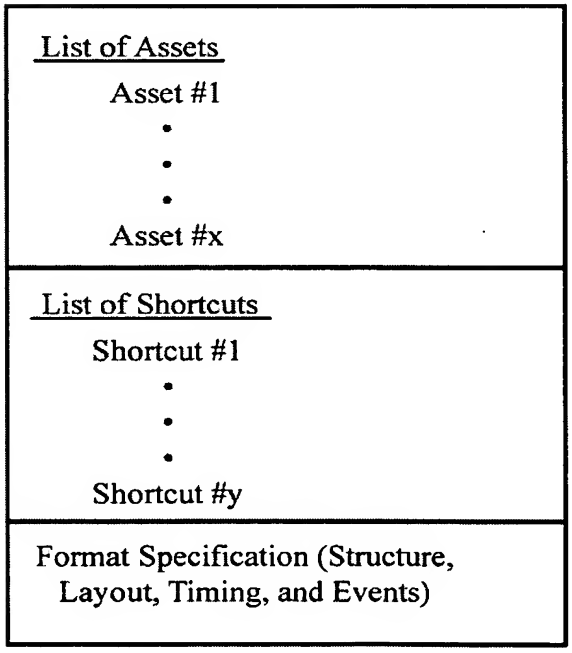

List of Assets
Asset #1
Asset #x
List of Shortcuts
Shortcut #1
Shortcut #y
Format Specification (Structure, Layout, Timing, and Events)

FIG. 5b

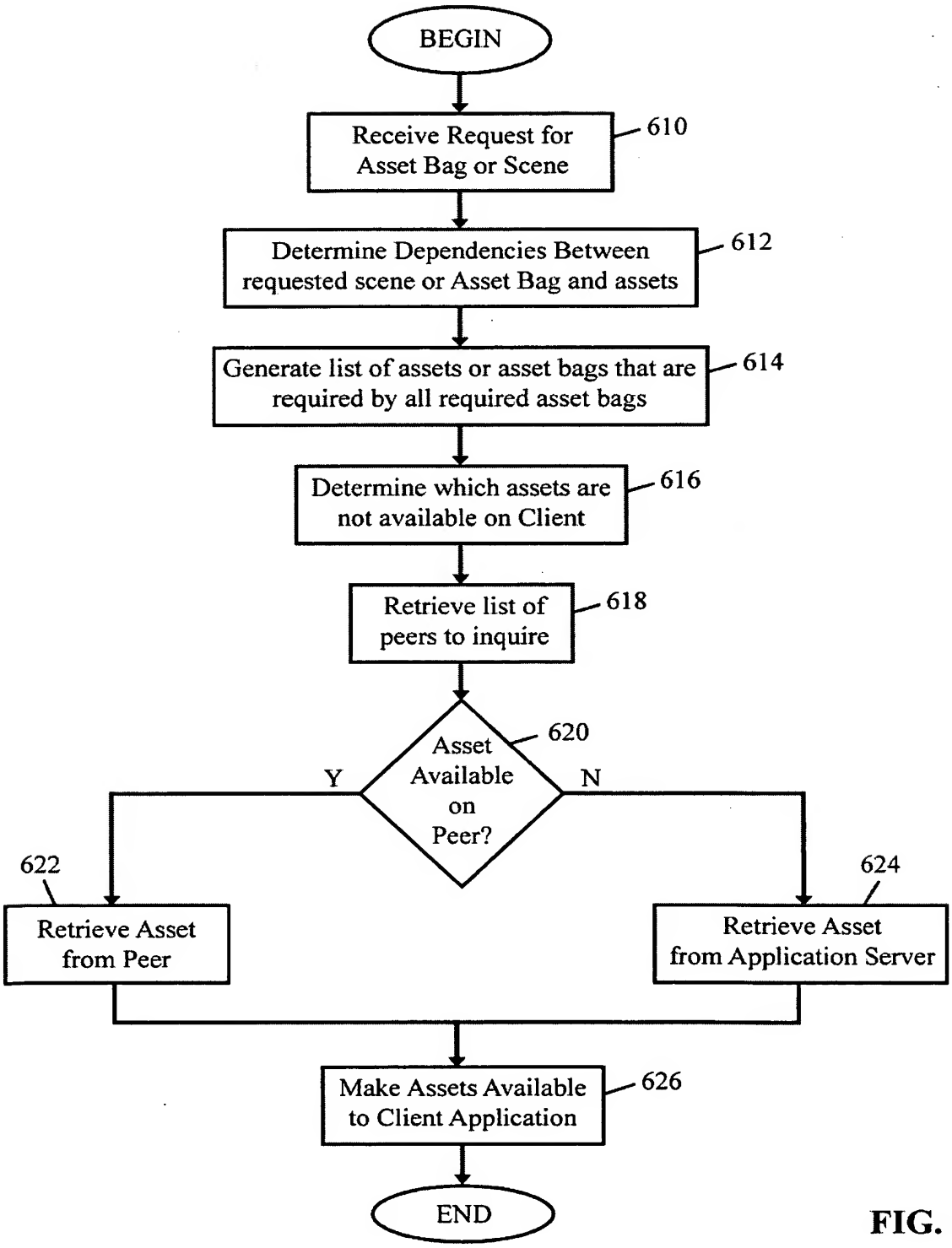

BEGIN
Receive Request for Asset Bag or Scene
610
Determine Dependencies Between requested scene or Asset Bag and assets
612
Generate list of assets or asset bags that are required by all required asset bags
614
Determine which assets are not available on Client
616
Retrieve list of peers to inquire
618
Asset Available on Peer?
620
Y
N
622
Retrieve Asset from Peer
624
Retrieve Asset from Application Server
Make Assets Available to Client Application
626
END

FIG. 6

FIG. 7

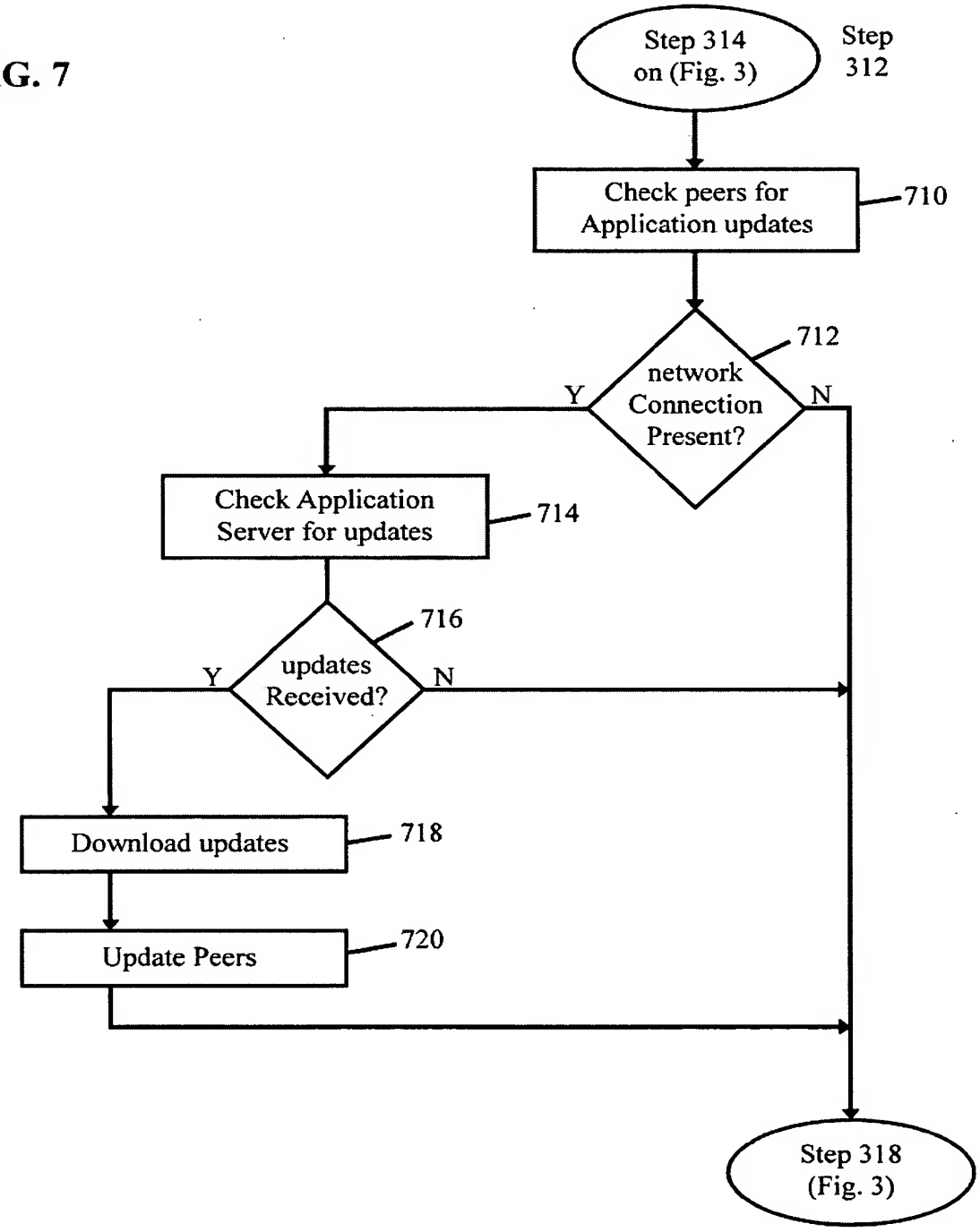
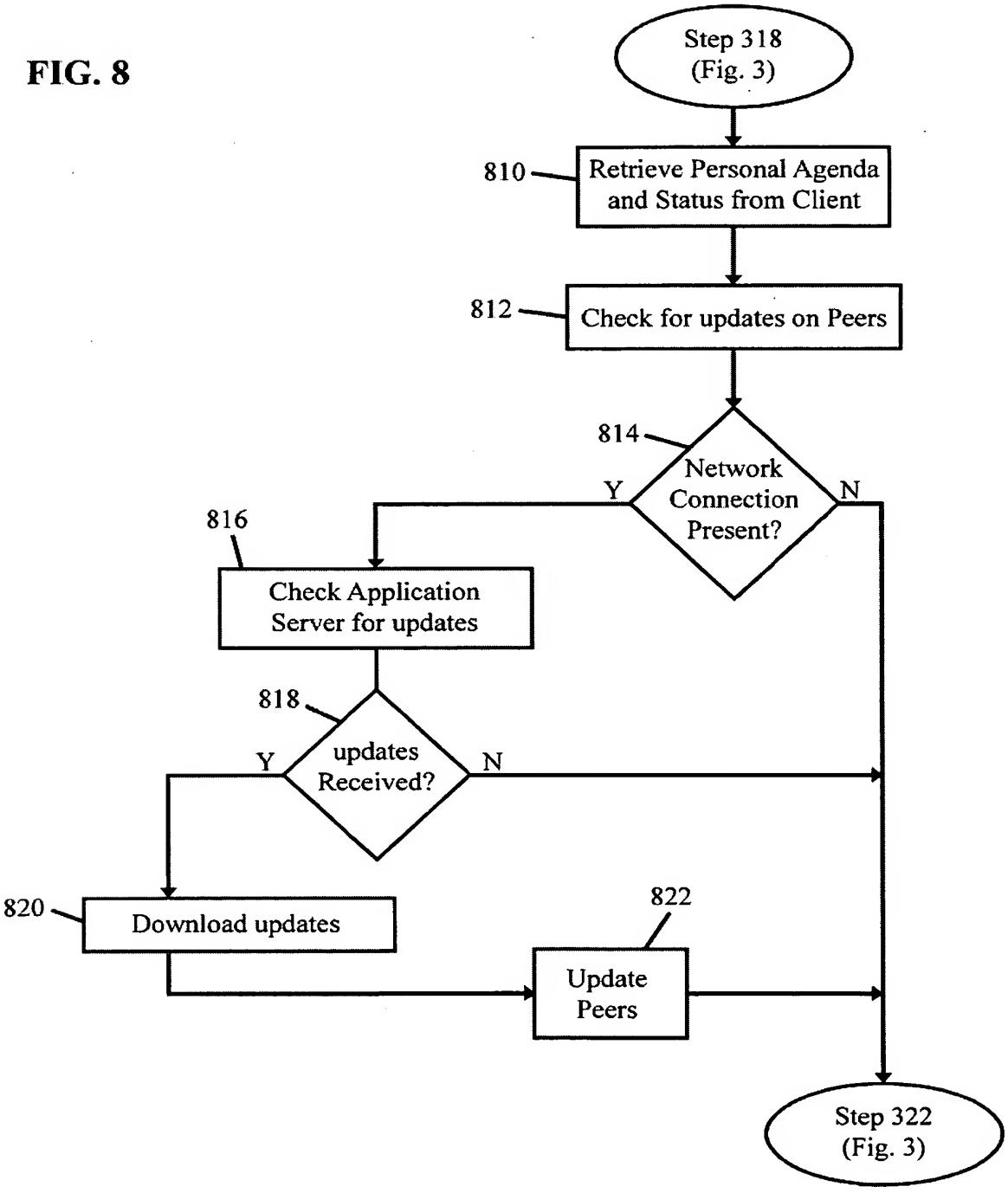

Step 314
on (Fig. 3)
Step
312
Check peers for
Application updates
710
712
network
Connection
Present?
Y
N
Check Application
Server for updates
714
716
updates
Received?
Y
N
Download updates
718
Update Peers
720
Step 318
(Fig. 3)

FIG. 8


Step 318
(Fig. 3)
810
Retrieve Personal Agenda and Status from Client
812
Check for updates on Peers
814
Network Connection Present?
Y
N
816
Check Application Server for updates
818
updates Received?
Y
N
820
Download updates
822
Update Peers
Step 322
(Fig. 3)

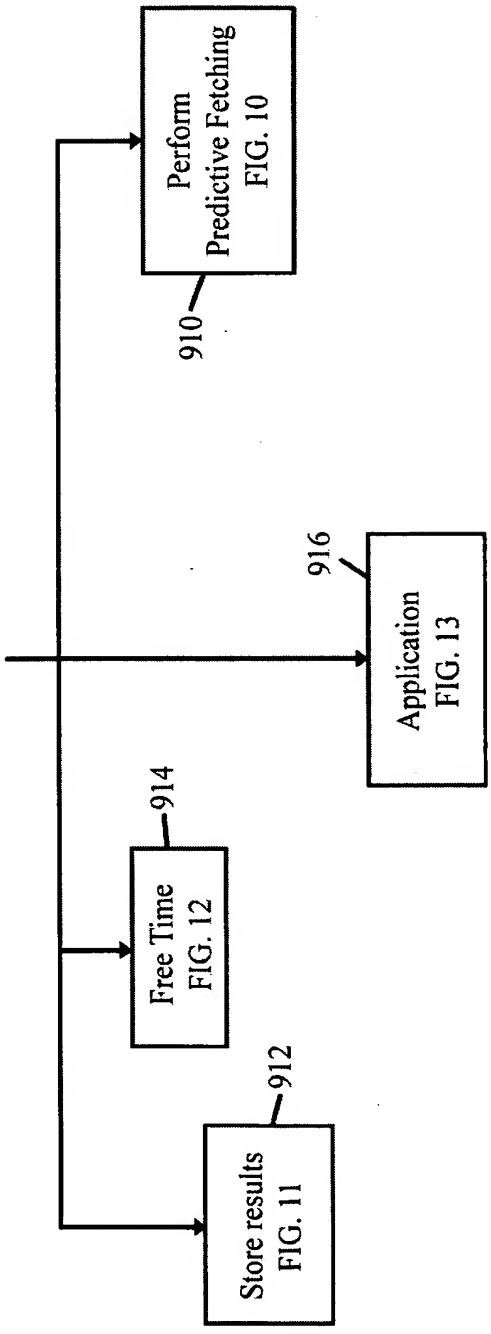

Perform
Predictive Fetching
FIG. 10
910
916
Application
FIG. 13
914
Free Time
FIG. 12
912
Store results
FIG. 11

FIG. 9

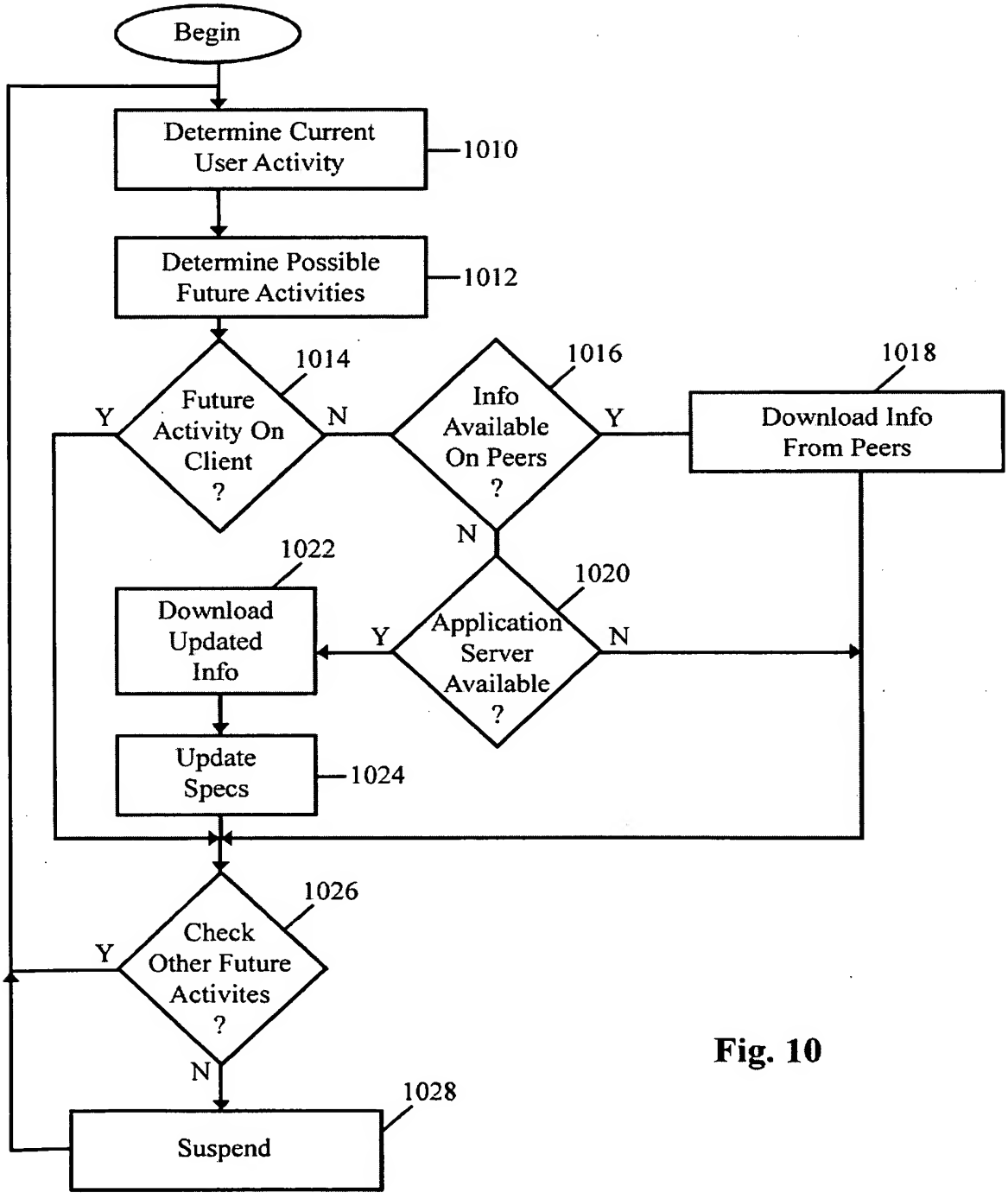

Begin
Determine Current User Activity
1010
Determine Possible Future Activities
1012
1014
Future Activity On Client ?
Y
N
1016
Info Available On Peers ?
Y
N
1018
Download Info From Peers
1022
Download Updated Info
1020
Application Server Available ?
Y
N
Update Specs
1024
1026
Check Other Future Activites ?
Y
N
1028
Suspend

Fig. 10

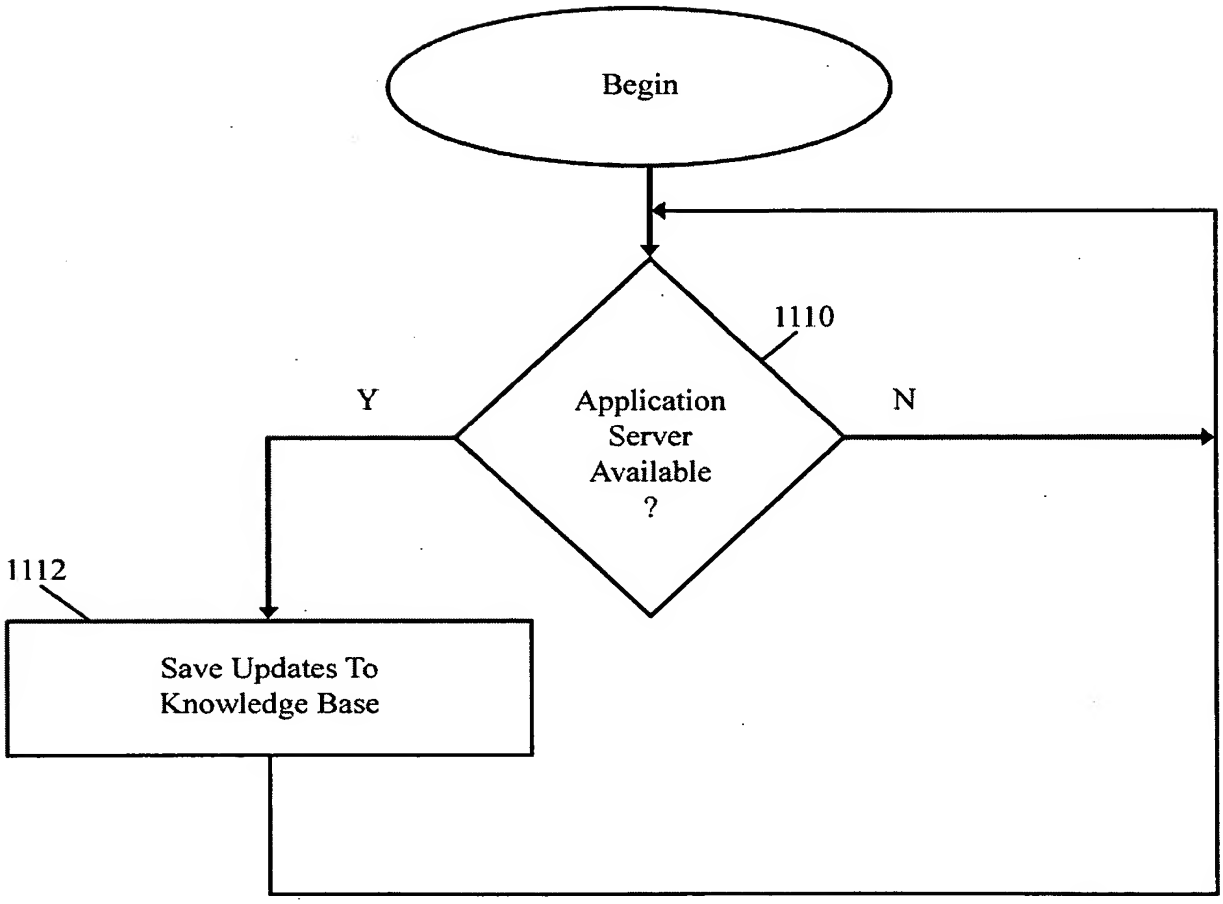

Begin
1110
Application Server Available ?
Y
N
1112
Save Updates To Knowledge Base

Fig. 11

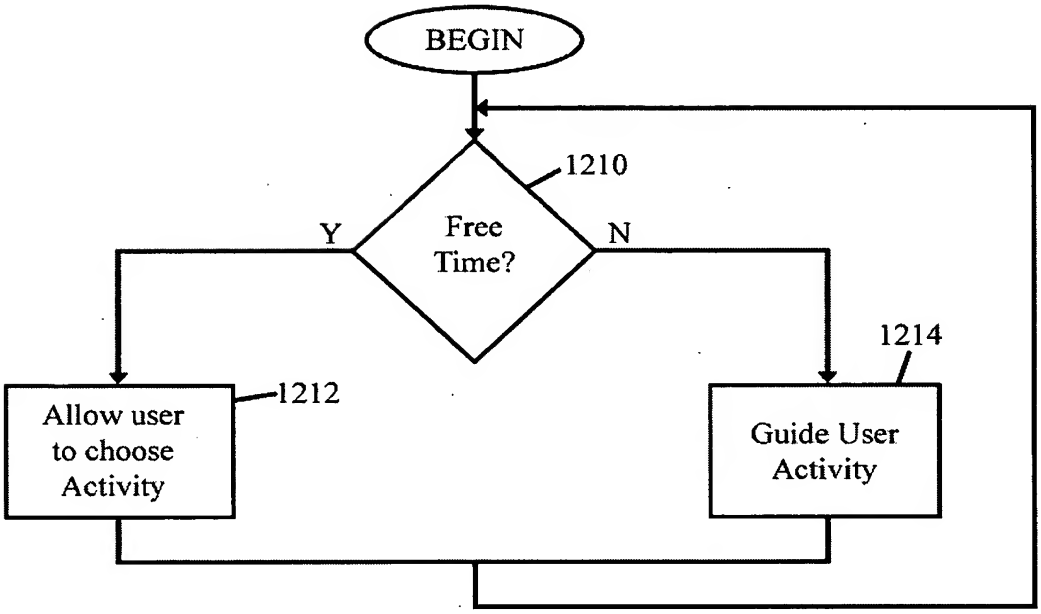

BEGIN
1210
Free
Time?
Y
N
1212
Allow user
to choose
Activity
1214
Guide User
Activity

FIG. 12

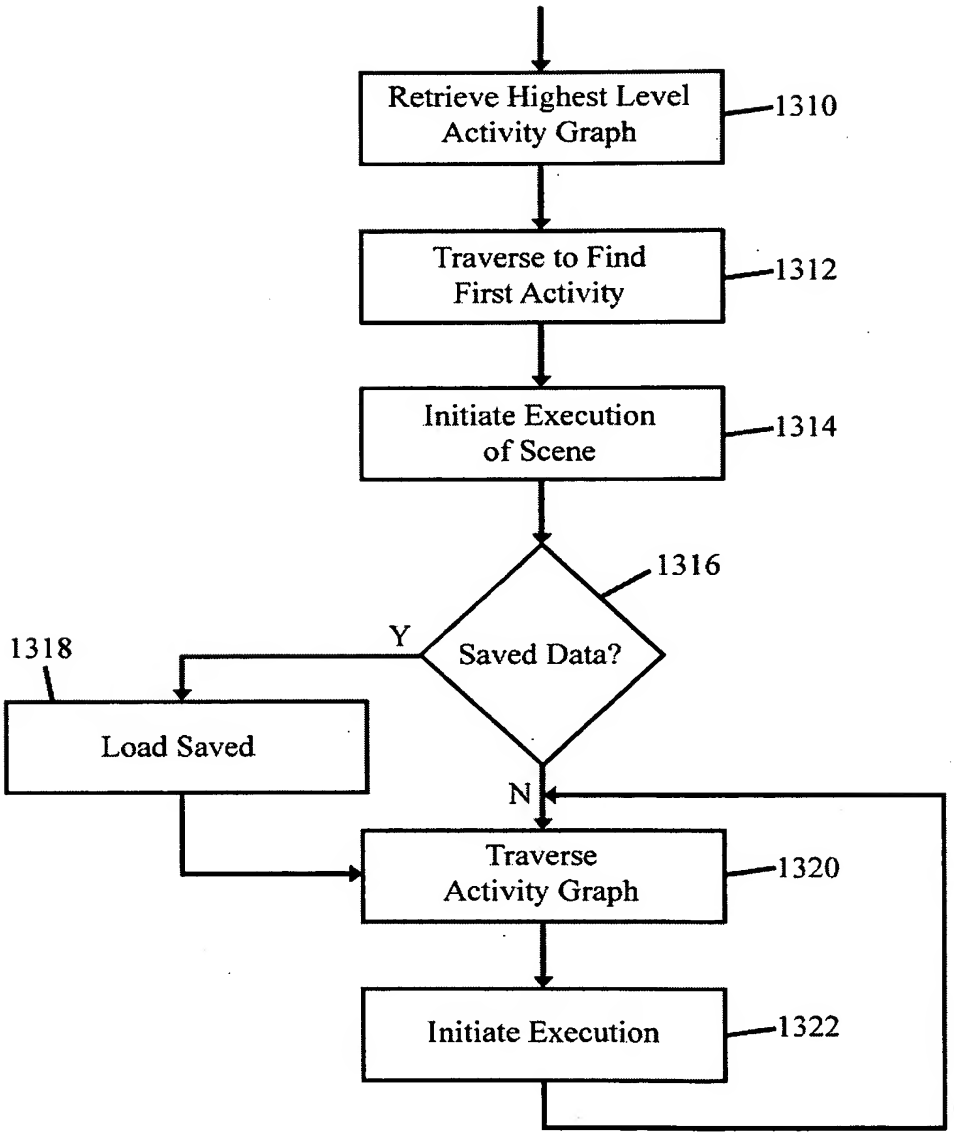

Retrieve Highest Level Activity Graph
1310
Traverse to Find First Activity
1312
Initiate Execution of Scene
1314
1316
Saved Data?
Y
1318
Load Saved
N
Traverse Activity Graph
1320
Initiate Execution
1322

FIG. 13

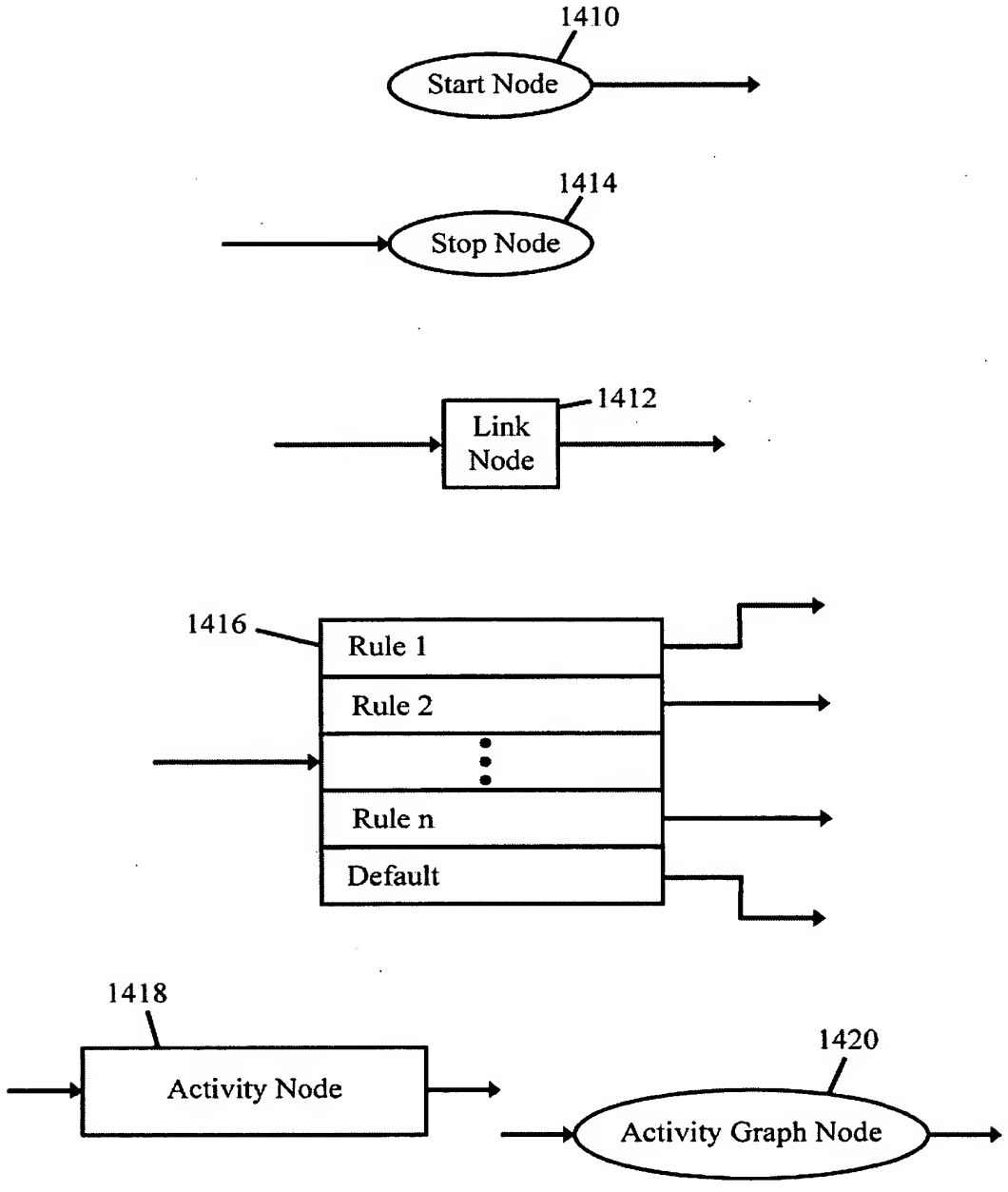

1410
Start Node
1414
Stop Node
1412
Link
Node
1416
Rule 1
Rule 2
Rule n
Default
1418
Activity Node
1420
Activity Graph Node

FIG. 14

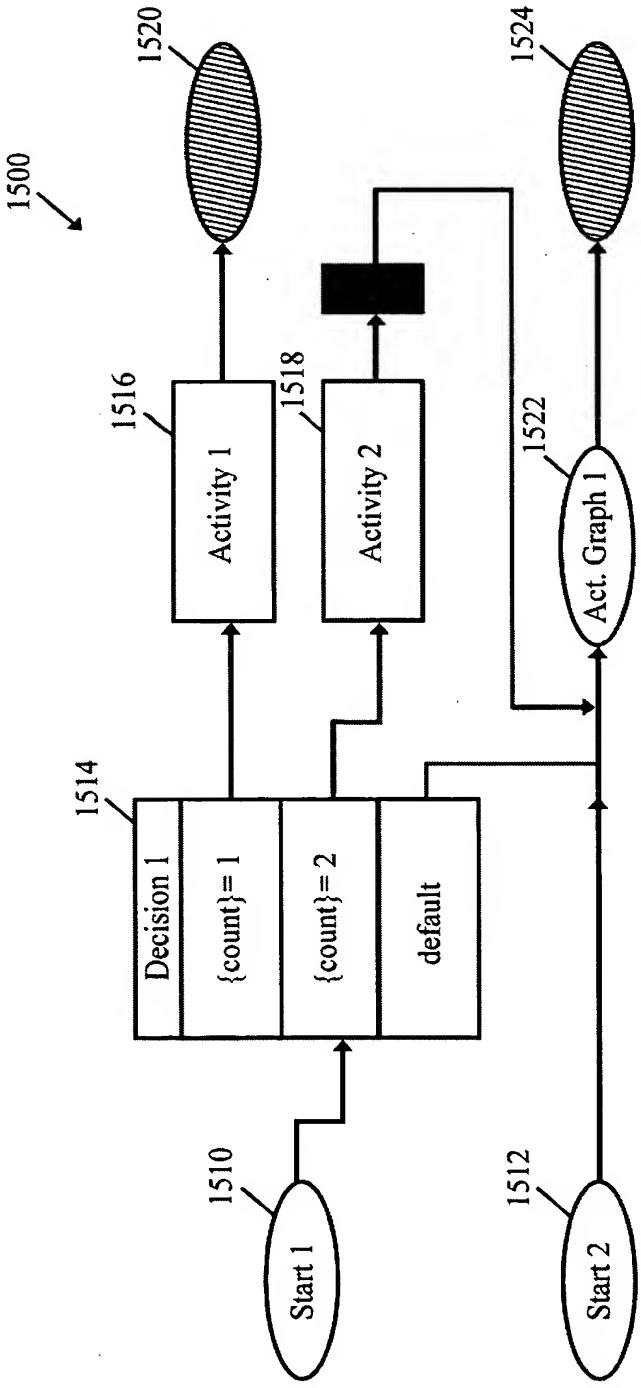

1500
1520
1524
1516
Activity 1
1518
Activity 2
1522
Act. Graph 1
1514
Decision 1
{count}= 1
{count}= 2
default
1510
Start 1
1512
Start 2

Fig. 15a

FIG 15b

Start 1
- Name: Start 1
- Type: Start
- Follower: Decision 1

Start 2
- Name: Start 2
- Type: Start
- Follower: Act. Graph 1

Decision 1
- Name: Decision 1
- Rules: Rule 1, Rule 2
- Parameters: Character = Asset Bag 1
- Aliases: count = Supervisor.count
- Values: count = {count} +1

Rule 1
- Criteria: {count}= 1
- Follower: Activity 1

Rule 2
- Criteria: {count} = 2
- Follower: Activity 2

Rule 3
- Criteria: default (always true)
- Follower: Act. Graph 1

Activity 1
- Name: Activity 1
- Type: Activity
- Follower: Unnamed Stop 1
- Definition: Act. Def. 1
- Parameters: Intro = Asset Bag 2 (Asset Key 1)

Activity 2
- Name : Activity 2
- Type: Activity
- Follower: Unnamed Link 1
- Definition: Act. Def. 1
- Parameters: Intro = Asset Bag 2 (Asset Key 1)

Unnamed Link 1
- Follower: Act. Graph 1

Act. Graph 1
- Name: Act. Graph 1
- Type: AG
- Follower: Unnamed Stop 2
- Definition: A.G. Def. 2
- Parameters: Data = Asset Bag 3

Act. Def. 1
- Name: Act. Def. 1
- Type: Activity Definition
- Action: Run Scene (Scene 1)
- Assets: Scene 1, Scene 2

A.G. Def. 2 (not shown)
- Name: A.G. Def. 2
- Type: Activity Graph Definition
- Start Points: Start 3, Start 4
- Default Start Point: Start 3
- Other nodes not defined.

A.G. Def. 1
- Name: A.G. Def. 1
- Type: Activity Graph Definition
- Start Points: Start 1, Start 2
- Default Start Point: Start 1
- Nodes: Start 1, Start 2, Decision 1, Activity 1, Activity 2, Act. Graph 1, Unnamed Link, Unnamed Stop 1, Unnamed Stop 2

REPLACEMENT
SHEET

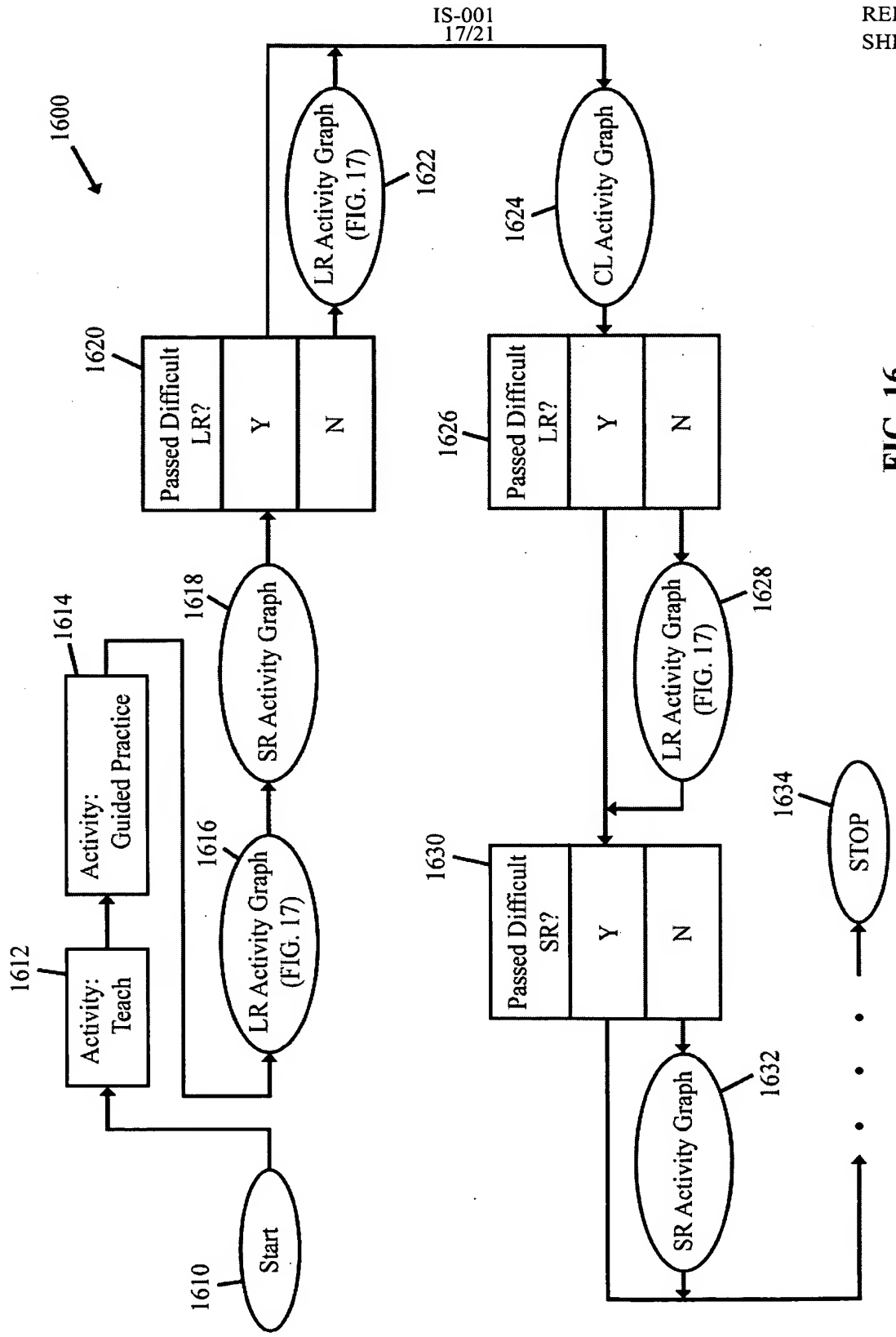

1600
1610
Start
1612
Activity: Teach
1614
Activity: Guided Practice
1616
LR Activity Graph (FIG. 17)
1618
SR Activity Graph
1620
Passed Difficult LR?
Y
N
1622
LR Activity Graph (FIG. 17)
1624
CL Activity Graph
1626
Passed Difficult LR?
Y
N
1628
LR Activity Graph (FIG. 17)
1630
Passed Difficult SR?
Y
N
1632
SR Activity Graph
1634
STOP

FIG. 16

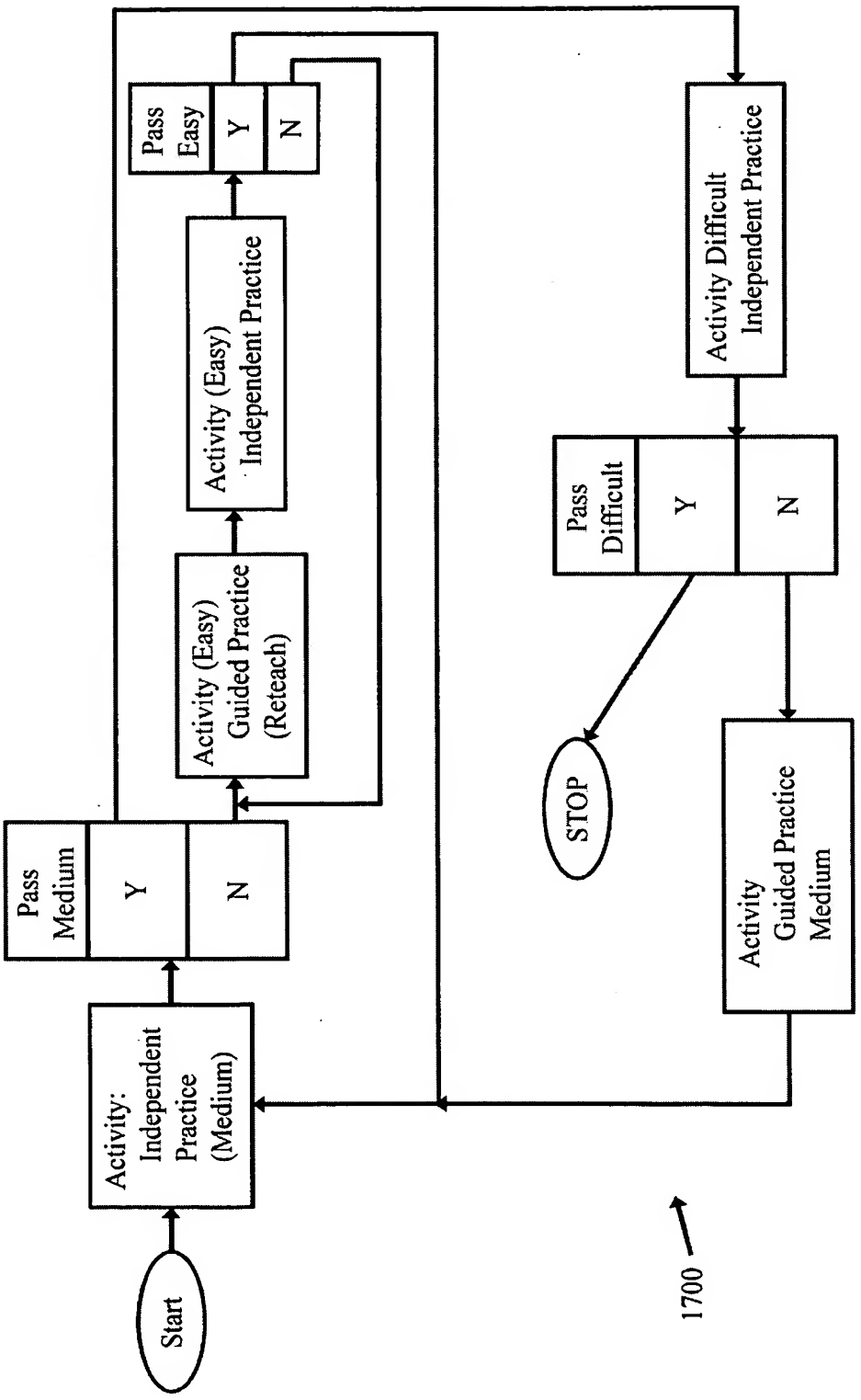

Start
Activity: Independent Practice (Medium)
Pass Medium
Y
N
Activity (Easy) Guided Practice (Reteach)
Activity (Easy) Independent Practice
Pass Easy
Y
N
Activity Difficult Independent Practice
Pass Difficult
Y
N
STOP
Activity Guided Practice Medium
1700

FIG. 17

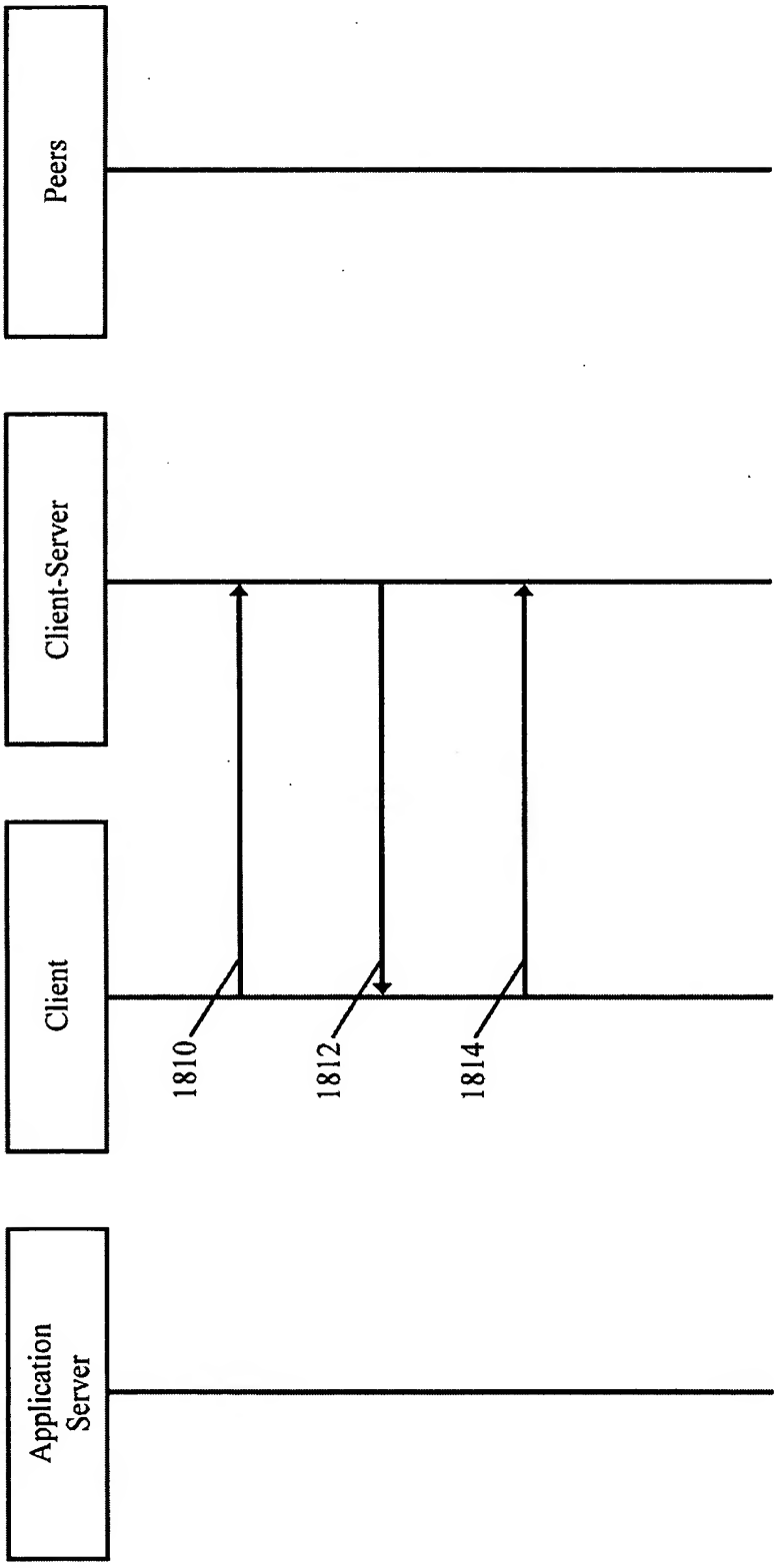

Peers
Client-Server
Client
Application Server
1810
1812
1814

Fig. 18

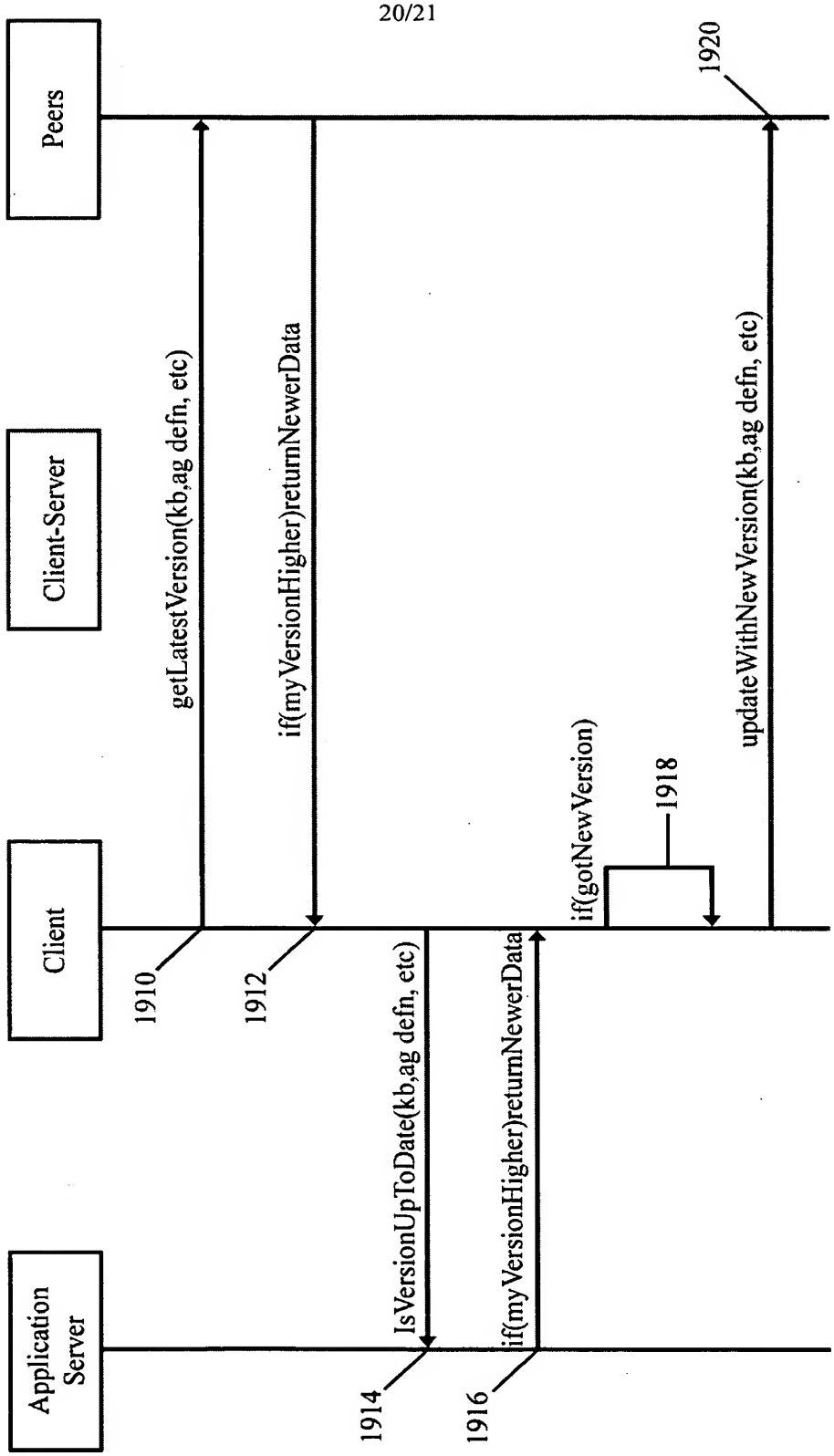

Peers
Client-Server
Client
Application Server
getLatestVersion(kb,ag defn, etc)
if(myVersionHigher)returnNewerData
IsVersionUpToDate(kb,ag defn, etc)
if(myVersionHigher)returnNewerData
if(gotNewVersion)
updateWithNewVersion(kb,ag defn, etc)
1910
1912
1914
1916
1918
1920

Fig. 19

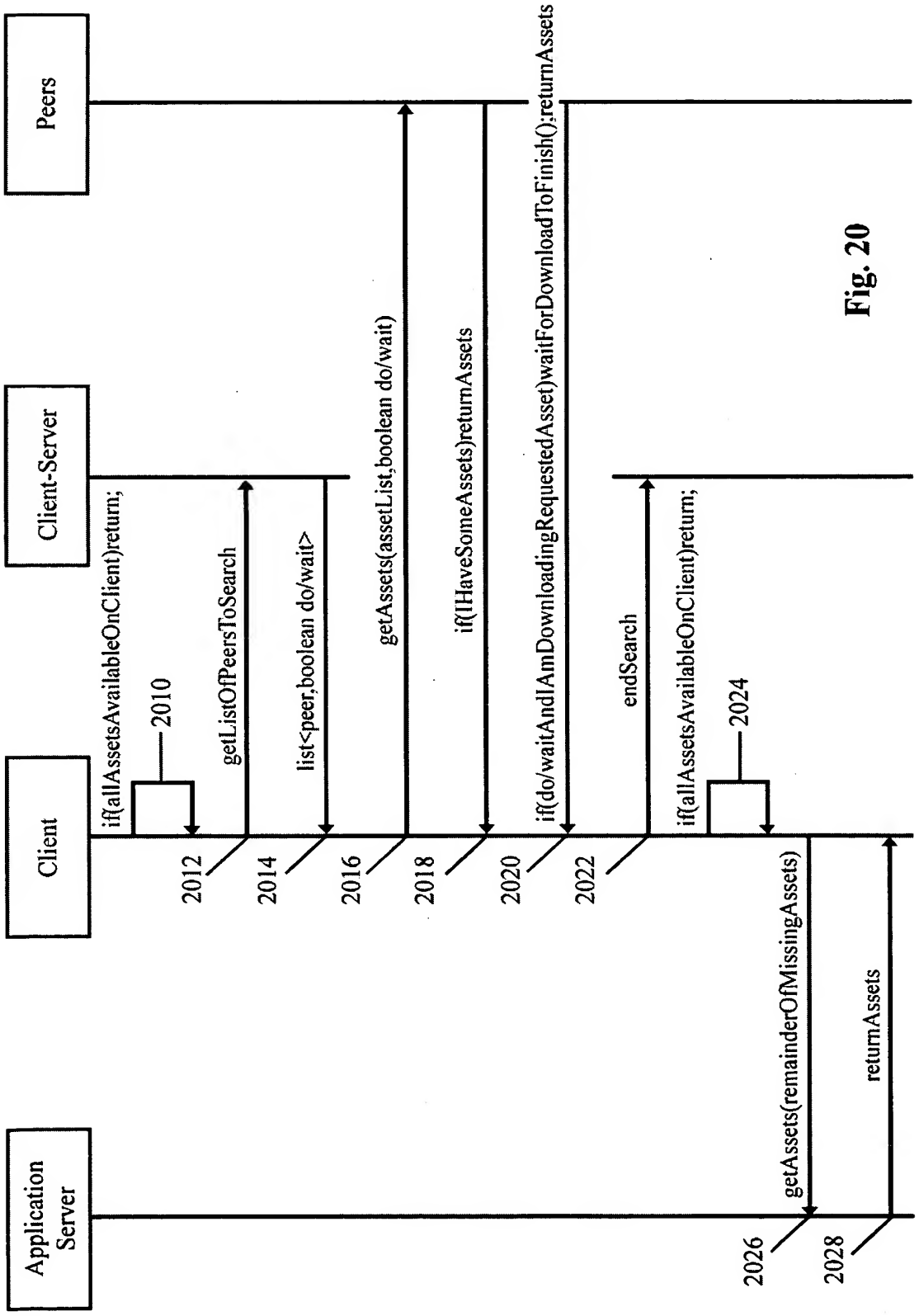

Peers
Client-Server
Client
Application Server
if(allAssetsAvailableOnClient)return;
2010
getListOfPeersToSearch
list<peer,boolean do/wait>
getAssets(assetList,boolean do/wait)
if(IHaveSomeAssets)returnAssets
if(do/waitAndIAmDownloadingRequestedAsset)waitForDownloadToFinish();returnAssets
endSearch
if(allAssetsAvailableOnClient)return;
2024
getAssets(remainderOfMissingAssets)
returnAssets
2012
2014
2016
2018
2020
2022
2026
2028

Fig. 20